



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2014-0235; Directorate Identifier 2013-NM-249-AD; Amendment 39-18015; AD 2014-22-10]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model DC-8-55, DC-8F-54, and DC-8F-55 airplanes, Model DC-8-60 series airplanes, Model DC-8-60F series airplanes, Model DC-8-70 series airplanes, and Model DC-8-70F series airplanes. This AD was prompted by multiple reports of cracking of the upper aft skin panel of the fuselage. An evaluation by the design approval holder (DAH) indicates that the upper aft skin panel of the fuselage is subject to widespread fatigue damage (WFD). This AD requires removing any previously installed local repairs; installing a full-length improvement modification with or without finger doublers, or a full-length repair with or without finger doublers, as applicable; and doing repetitive inspections for cracking of the doublers, and repair if necessary. We are issuing this AD to detect and correct fatigue cracking of the upper aft skin panel of the fuselage, which could result in loss of structural integrity and consequent rapid decompression of the airplane.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0235; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Chandraduth Ramdoss, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Blvd, Suite 100, Lakewood, CA 90712-4137, phone: 562-627-5239; fax: 562-627-5210; email: [chandraduth.ramdoss@faa.gov](mailto:chandraduth.ramdoss@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model DC-8-55, DC-8F-54, and DC-8F-55 airplanes, Model DC-8-60 series airplanes, Model DC-8-60F series airplanes, Model DC-8-70 series airplanes, and Model DC-8-70F series airplanes. The NPRM published in the Federal Register on April 17, 2014 (79 FR 21648). The NPRM was prompted by multiple reports of cracking of the upper aft skin panel of the fuselage. An evaluation by the DAH indicates that the upper aft skin panel of the fuselage is subject to WFD. The NPRM proposed to require removing any previously installed local repairs; installing a full-length improvement modification with finger doublers or a full-length repair with finger doublers; and doing repetitive inspections for cracking of the doublers, and repair if necessary. We are issuing this AD to detect and correct fatigue cracking of the upper aft skin panel of the fuselage, which could result in loss of structural integrity and consequent rapid decompression of the airplane.

### **Comment**

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM (79 FR 21648, April 17, 2014), and the FAA's response to the comment.

### **Request to Revise Repair or Modification Procedure**

Boeing requested that we revise paragraph (g) of the NPRM (79 FR 21648, April 17, 2014) to allow operators the option to repair or modify without finger doublers. Boeing also requested that we revise the inspection requirements of paragraph (h) of the NPRM to address the option to repair or modify without finger doublers. Boeing stated that the service rework drawing that is referenced in Boeing Alert Service Bulletin

DC8-53A080, Revision 2, dated September 18, 2013, includes two repair and preventive modification configurations, depending on whether finger doublers will be installed.

We agree with the commenter's request to allow the procedure to repair or modify without finger doublers as an approved option for repair or modification. We have revised paragraphs (g) and (h)(1) of this final rule accordingly.

### **Conclusion**

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 21648, April 17, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 21648, April 17, 2014).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

### **Costs of Compliance**

We estimate that this AD affects 18 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Full-length modification or repair	Up to 184 work-hours X \$85 per hour = \$15,640	Up to \$14,720	Up to \$30,360	Up to \$546,480
Inspection	9 work-hours X \$85 per hour = \$765 per inspection cycle	\$0	\$765 per inspection cycle	\$13,770 per inspection cycle

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2014-22-10 **The Boeing Company**: Amendment 39-18015; Docket No. FAA-2014-0235; Directorate Identifier 2013-MN-249-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to The Boeing Company airplanes identified in paragraphs (c)(1) through (c)(6) of this AD, certificated in any category, as identified in Boeing Alert Service Bulletin DC8-53A080, Revision 2, dated September 18, 2013.

- (1) The Boeing Company Model DC-8-55 airplanes.
- (2) The Boeing Company Model DC-8F-54 and DC-8F-55 airplanes.
- (3) The Boeing Company Model DC-8-61, DC-8-62, and DC-8-63 airplanes.
- (4) The Boeing Company Model DC-8-61F, DC-8-62F, and DC-8-63F airplanes.
- (5) The Boeing Company Model DC-8-71, DC-8-72, and DC-8-73 airplanes.
- (6) The Boeing Company Model DC-8-71F, DC-8-72F, and DC-8-73F airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 53, Fuselage.

**(e) Unsafe Condition**

This AD was prompted by multiple reports of cracking of the upper aft skin panel of the fuselage. An evaluation by the design approval holder indicates that the upper aft skin panel of the fuselage is subject to widespread fatigue damage. We are issuing this AD to detect and correct fatigue cracking of the upper aft skin panel of the fuselage, which could result in loss of structural integrity and consequent rapid decompression of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Modification or Repair**

Before the accumulation of 45,400 total flight cycles, or within 72 months after the effective date of this AD, whichever occurs later: Remove any previously installed local repairs and install a full-length improvement modification with or without finger doublers, or a full-length repair with or without finger doublers, as applicable, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC8-53A080, Revision 2, dated September 18, 2013. Installation of the full-length improvement modification or full-length repair, in accordance with paragraph (i) of AD 2008-06-23, Amendment 39-15435 (73 FR 14378, March 18, 2008), is a method of compliance with the requirements of this paragraph. Installation of a local repair as specified in paragraph (i) of AD 2008-06-23, does not comply with the requirements of this paragraph.

#### **(h) Post-modification or Post-repair Repetitive Inspections**

After accomplishing the actions required by paragraph (g) of this AD, at the applicable time and intervals specified in paragraph (h)(1) or (h)(2) of this AD: Do an external visual inspection or low frequency eddy current (LFEC) inspection for cracking along all four edges of each external doubler, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC8-53A080, Revision 2, dated September 18, 2013. Repeat the inspections thereafter at the applicable time and interval specified in paragraphs (h)(1) and (h)(2) of this AD. Accomplishment of the applicable repetitive inspection specified in paragraph (j)(1) or (j)(2)(ii) of AD 2008-06-23, Amendment 39-15435 (73 FR 14378, March 18, 2008), is a method of compliance with the applicable inspection requirements of this paragraph.

(1) For repair or modification with finger doublers: Within 30,000 flight cycles after doing the actions specified in paragraph (g) of this AD, do an external visual inspection. Repeat the external visual inspection thereafter at intervals not to exceed 5,000 flight cycles.

(2) For repair or modification without finger doublers: Within 15,000 flight cycles after doing the actions specified in paragraph (g) of this AD, do a LFEC inspection. Repeat the LFEC inspection thereafter at intervals not to exceed 10,000 flight cycles.

#### **(i) Cracking Repair**

If any cracking is found during any inspection required by paragraph (h) of this AD: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

#### **(j) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin DC8-53A080, dated June 22, 2004; or Boeing Alert



Service Bulletin DC8-53A080, Revision 1, dated May 3, 2013. Boeing Alert Service Bulletin DC8-53A080, dated June 22, 2004, is incorporated by reference in AD 2008-06-23, Amendment 39-15435 (73 FR 14378, March 18, 2008). Boeing Alert Service Bulletin DC8-53A080, Revision 1, dated May 3, 2013, is not incorporated by reference in this AD.

**(k) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (l)(1) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-REQUESTS@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and 14 CFR 25.571, Amendment 45, and the approval must specifically refer to this AD.

**(l) Related Information**

(1) For more information about this AD, contact Chandraduth Ramdoss, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Blvd, Suite 100, Lakewood, CA 90712-4137, phone: 562-627-5239; fax: 562-627-5210; email: [chandraduth.ramdoss@faa.gov](mailto:chandraduth.ramdoss@faa.gov).

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (m)(3) and (m)(4) of this AD

**(m) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin DC8-53A080, Revision 2, dated September 18, 2013.

(ii) Reserved.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:  
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on October 28, 2014.

Jeffrey E. Duven,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2014-26439 Filed 11/26/2014 at 8:45 am; Publication Date: 11/28/2014]